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(54) **ACCOUNTABILITY AND TRUST IN DISTRIBUTED LEDGER SYSTEMS**

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(57) **ABSTRACT**

Distributed ledger systems that provide enhanced accountability and trust are described. A sender node may send messages to a receiver node. The sender node may compute a value (e.g., a hash) based on the sent messages and at least one previously sent message. The sender node may receive a confirmation message for the messages from the receiver node including a value computed by the receiver node based on the messages and at least one previously received message. The sender node may compare the computed value to the value included in the confirmation message to determine that the receiver node has or has not received a correct sequence of messages. The confirmation message may also include a summary of local data of the receiver node that indicates to the sender node that the receiver node has or has not processed all messages received.